

WHAT IS CLAIMED IS:

1. A method for diminishing, inhibiting or eliminating addiction-related behavior of a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases central nervous system GABA levels in said mammal.
2. A method according to claim1, wherein said addiction-related behavior is diminished, inhibited or eliminated without an aversive response to said composition.
3. A method according to claim1, wherein said addiction-related behavior is diminished, inhibited or eliminated without an appetitive response to said composition.
4. A method according to claim1, wherein said addiction-related behavior is diminished, inhibited or eliminated without an alteration in locomotor function of said mammal.
5. A method according to claim 1, wherein said composition comprises gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate, tiagabine, acamprosate or a pharmaceutically acceptable salt thereof, or an enantiomer or racemic mixture thereof.
6. A method according to claim 1, wherein said addiction related behavior is conditioned place preference.

7. A method according to claim 1, wherein said composition comprises gabapentin administered in an amount of about 500mg to about 2g/day.
8. A method according to claim 1, wherein said composition comprises valproic acid administered in an amount of about 5mg/kg to about 100 mg/kg/day.
9. A method according to claim 1, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.
10. A method according to claim 1, wherein said composition comprises progabide administered in an amount of about 250mg to about 2g/day.
11. A method according to claim 1, wherein said composition comprises fengabine administered in an amount of about 250mg to about 4g/day.
12. A method according to claim 1, wherein said composition comprises gamma-hydroxybutyric acid administered in an amount of about 5mg/kg to about 100mg/kg/day.
13. A method according to claim 1, wherein said composition is not addictive to said mammal.
14. A method according to claim 1, wherein said mammal is a primate.
15. A method according to claim 1, wherein said drug of abuse is selected from the group consisting of pshychostimulants, narcotic analgesics, alcohols, addictive alkaloids or combinations thereof.
16. A method according to claim 1, wherein said drug of abuse is selected from the group consisting of cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine, or combinations thereof.

17. A method for diminishing, inhibiting or eliminating cravings associated with addiction to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases central nervous system GABA levels in said mammal.

18. A method according to claim 17, wherein said cravings are diminished, inhibited or eliminated without an aversive response to said composition.

19. A method according to claim 17, wherein said cravings are diminished, inhibited or eliminated without an appetitive response to said composition.

20. A method according to claim 17, wherein said cravings are diminished, inhibited or eliminated without an alteration in locomotor function of said mammal

21. A method according to claim 17, wherein said composition comprises gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate, tiagabine, acamprosate or a pharmaceutically acceptable salt thereof, or an enantiomer or racemic mixture thereof.

22. A method according to claim 17, wherein said composition comprises gabapentin administered in an amount of about 500mg to about 2g/day.

23. A method according to claim 17, wherein said composition comprises valproic acid administered in an amount of about 5mg/kg to about 100 mg/kg/day.

24. A method according to claim 17, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

25. A method according to claim 17, wherein said composition comprises progabide administered in an amount of about 250mg to about 2g/day.

26. A method according to claim 17, wherein said composition comprises fengabine administered in an amount of about 250mg to about 4g/day.
27. A method according to claim 17, wherein said composition comprises gamma-hydroxybutyric acid administered in an amount of about 5mg/kg to about 100mg/kg/day.
28. A method according to claim 17, wherein said mammal is a primate.
29. A method according to claim 17, wherein said composition is not addictive to said mammal.
30. A method according to claim 17, wherein said drug of abuse is selected from the group consisting of pshychostimulants, narcotic analgesics, alcohols, addictive alkaloids or combinations thereof.
31. A method according to claim 17, wherein said drug of abuse is selected from the group consisting of cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine, or combinations thereof.
32. A method for diminishing, inhibiting or eliminating rewarding/incentive effects in a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases central nervous system GABA levels in said mammal.
33. A method according to claim 32, wherein said rewarding/incentive effects are diminished, inhibited or eliminated without an aversive response to said composition.
34. A method according to claim 32, wherein said rewarding/incentive effects are diminished, inhibited or eliminated without an appetitive response to said composition.

35. A method according to claim 32, wherein said rewarding/incentive effects are diminished, inhibited or eliminated without an alteration of locomotor function in said mammal.

36. A method according to claim 32, wherein said composition comprises gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate, tiagabine, acamprosate or a pharmaceutically acceptable salt thereof, or an enantiomer or racemic mixture thereof.

37. A method according to claim 32, wherein said composition comprises gabapentin administered in an amount of about 500mg to about 2g/day.

38. A method according to claim 32, wherein said composition comprises valproic acid administered in an amount of about 5mg/kg to about 100 mg/kg/day.

39. A method according to claim 32, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

40. A method according to claim 32, wherein said composition comprises progabide administered in an amount of about 250mg to about 2g/day.

41. A method according to claim 32, wherein said composition comprises fengabine administered in an amount of about 250mg to about 4g/day.

42. A method according to claim 32, wherein said composition comprises gamma-hydroxybutyric acid administered in an amount of about 5mg/kg to about 100mg/kg/day.

43. A method according to claim 32, wherein said mammal is a primate.

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44. A method according to claim 32, wherein said composition is not addictive to said mammal.

45. A method according to claim 32, wherein said drug of abuse is selected from the group consisting of pshychostimulants, narcotic analgesics, alcohols, addictive alkaloids or combinations thereof.

46. A method according to claim 32, wherein said drug of abuse is selected from the group consisting of cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine, or combinations thereof.

47. A method for diminishing, inhibiting or eliminating dependency characteristics associated with addiction to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases central nervous system GABA levels in said mammal..

48. A method according to claim 47, wherein said dependency characteristics are diminished, inhibited or eliminated without an aversive response to said composition.

49. A method according to claim 47, wherein said dependency characteristics are diminished, inhibited or eliminated without an appetitive response to said composition.

50. A method according to claim 47, wherein said dependency characteristics are diminished, inhibited or eliminated without an alteration of locomotor function in said mammal.

51. A method according to claim 47, wherein said composition comprises gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate, tiagabine, acamprosate or a pharmaceutically acceptable salt thereof, or an enantiomer or racemic mixture thereof.

52. A method according to claim 47, wherein said composition comprises gabapentin administered in an amount of about 500mg to about 2g/day.
53. A method according to claim 47, wherein said composition comprises valproic acid administered in an amount of about 5mg/kg to about 100 mg/kg/day.
54. A method according to claim 47, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.
55. A method according to claim 47, wherein said composition comprises progabide administered in an amount of about 250mg to about 2g/day.
56. A method according to claim 47, wherein said composition comprises fengabine administered in an amount of about 250mg to about 4g/day.
57. A method according to claim 47, wherein said composition comprises gamma-hydroxybutyric acid administered in an amount of about 5mg/kg to about 100mg/kg/day.
58. A method according to claim 47, wherein said mammal is a primate.
59. A method according to claim 47, wherein said composition is not addictive to said mammal.
60. A method according to claim 47, wherein said drug of abuse is selected from the group consisting of pshychostimulants, narcotic analgesics, alcohols, addictive alkaloids or combinations thereof.
61. A method according to claim 47, wherein said drug of abuse is selected from the group consisting of cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine, or combinations thereof.

62. A method for preventing addiction to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases central nervous system GABA levels in said mammal..

63. A method according to claim 62, wherein said addiction is prevented without an aversive response to said composition.

64. A method according to claim 62, wherein said addiction is prevented without an appetitive response to said composition.

65. A method according to claim 62, wherein said addiction is prevented without an alteration in locomotor function of said mammal.

66. A method according to claim 62, wherein said composition comprises gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate, tiagabine, acamprosate or a pharmaceutically acceptable salt thereof, or an enantiomer or racemic mixture thereof.

67. A method according to claim 62, wherein said composition comprises gabapentin administered in an amount of about 500mg to about 2g/day.

68. A method according to claim 62, wherein said composition comprises valproic acid administered in an amount of about 5mg/kg to about 100 mg/kg/day.

69. A method according to claim 62, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

70. A method according to claim 62, wherein said composition comprises progabide administered in an amount of about 250mg to about 2g/day.

71. A method according to claim 62, wherein said composition comprises fengabine administered in an amount of about 250mg to about 4g/day.

72. A method according to claim 62 wherein said composition comprises gamma-hydroxybutyric acid administered in an amount of about 5mg/kg to about 100mg/kg/day.

73. A method according to claim 62, wherein said mammal is a primate.

74. A method according to claim 62, wherein said composition is not addictive to said mammal.

75. A method according to claim 62, wherein said drug of abuse is selected from the group consisting of pshychostimulants, narcotic analgesics, alcohols, addictive alkaloids or combinations thereof.

76. A method according to claim 62, wherein said drug of abuse is selected from the group consisting of cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine, or other drugs of abuse, or combinations thereof.

77. A method for treating addiction to cocaine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, to said mammal.

78. A method according to claim 77, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

79. A method for treating addiction to nicotine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable

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salt thereof, or an enantiomer or a racemic mixture thereof, to said mammal.

80. A method according to claim 79, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

81. A method for treating addiction to morphine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, to said mammal.

82. A method according to claim 81, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

83. A method for treating addiction to methamphetamine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, to said mammal.

84. A method according to claim 83, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

85. A method for treating addiction to alcohol in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, to said mammal.

86. A method according to claim 85, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

87. method for treating addiction to phencyclidine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, to said mammal.

88. A method according to claim 87, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

89. A method for treating addiction to methylenedioxymethamphetamine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or racemic mixture thereof, to said mammal.

90. A method according to claim 89, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

91. A method of treating addiction to a combination of drugs of abuse in a mammal, wherein said method comprises administering an effective amount of topiramate for a pharmaceutically acceptable salt thereof or an enantiomer or racemic mixture thereof, to said mammal.

92. A method according to claim 91, wherein said composition comprises topiramate administered in an amount of about 25mg to about 1g/day.

93. A method according to claim 91, wherein said combination of drugs of abuse is selected from the group consisting of psychostimulants, narcotic analgesics, alcohols, addictive alkaloids or combinations thereof.

94. A method according to claim 91, wherein said combination of drugs of abuse is selected from the group consisting of cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine, or combinations thereof.

95. A method for treating addiction to heroin in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a continuous function and that it satisfies the functional equation $f(x+y) = f(x) + f(y)$.

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a continuous function and that it satisfies the functional equation $f(x+y) = f(x) + f(y)$.